

ILLINOIS COMMERCE COMMISSION

DOCKET NO. _____

DIRECT TESTIMONY

OF

WILBON L. COOPER

Submitted On Behalf

Of

UNION ELECTRIC COMPANY

d/b/a AmerenUE

AND

CENTRAL ILLINOIS PUBLIC SERVICE COMPANY

d/b/a AmerenCIPS

December 15, 2000

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1. Q. Please state your name and business address.

A. My name is Wilbon L. Cooper. My business address is 1901 Chouteau Avenue,
St. Louis, Missouri 63103.

2. Q. By whom are you employed and in what capacity?

A. I am employed by Ameren Services Company as a Supervising Engineer in the
Rate Engineering Department of the Ameren Corporate Planning Function.

3. Q. Please describe Ameren Services Company.

A. Ameren Services Company is a subsidiary of Ameren Corporation. Ameren
Services provides various administrative and technical services for Union Electric
Company, doing business as AmerenUE (“AmerenUE”), and Central Illinois
Public Service Company, doing business as AmerenCIPS (“AmerenCIPS”), the
operating companies of Ameren Corporation (the “Ameren Companies”).

24

25 **4. Q. Please state your qualifications and educational background.**

26 **A.** I have included this information on Ameren Exhibit No. 8.1 attached to this
27 testimony.

28

29 **5. Q. Have you previously testified before any regulatory commissions?**

30 **A.** Yes, I have previously testified in cases before the Missouri Public Service
31 Commission, the Illinois Commerce Commission, and the Iowa State Utilities
32 Board on behalf of AmerenUE and Ameren Services during my more than
33 20 years of employment by those Ameren entities.

34

35 **6. Q. What is the extent of your responsibility in this case?**

36 **A.** I have responsibility for the overall coordination of cost allocation methodologies
37 which support the customer class cost of service studies performed by Ameren
38 Services for each of the Ameren Companies, and the resulting AmerenUE rates
39 and charges. Mr. Robert Mill, also an Ameren witness in this case, has
40 responsibility for the AmerenCIPS rates and charges resulting from these studies.

41

42 **7. Q. What is the purpose of your Direct Testimony in this case?**

43 **A.** My Direct Testimony will address three areas: (1) a general operating description
44 of AmerenCIPS' and AmerenUE's distribution systems, the investment and
45 operating costs of which are being allocated among each of the Ameren
46 Companies' various customer classes in this case; (2) a discussion of various cost

allocation and cost of service concepts which Ameren Services considered in the development of the cost studies being submitted with its testimony in this case; and (3) the proposed changes to tariffs in AmerenUE's Electric Delivery Services Rate Schedule Ill. C. C. No. 7 ("Schedule 7").

8. Q. What Exhibits are you sponsoring?

A. I am sponsoring Ameren Exhibit Nos. 8.1 through 8.5. As stated above, Ameren Exhibit No. 8.1 is a statement of my qualifications and educational background. Ameren Exhibit No. 8.2 is a listing of the Schedule 7 tariff sheets being filed in this proceeding. Ameren Exhibit No. 8.3 is a diagram which generally illustrates how electricity flows over an electric system, from its source to its ultimate destination. Ameren Exhibit No. 8.4 is a table of electric billing units and revenue summary for each DS tariff rate component, by voltage level. Ameren Exhibit No. 8.5 provides a comparison of DS tariff charges in effect today as compared to the charges being proposed by AmerenUE in this proceeding.

9. Q. Please describe the regulated utility services provided by the Ameren Companies.

A. AmerenCIPS' principal business is providing for the supply and/or transmission and distribution of electric energy to approximately 324,000 customers in the State of Illinois. AmerenCIPS also distributes natural gas to approximately 170,000 customers in Illinois.

AmerenUE's principal business is the generation and/or transmission and distribution of electric energy to approximately 1,117,000 customers in Missouri and 62,000 customers in Illinois. AmerenUE also distributes natural gas to approximately 109,000 customers in Missouri and 18,000 in Illinois.

Distribution System Operations

10. Q. Please identify Ameren Exhibit No. 8.3 attached to your testimony.

A. As previously mentioned, Ameren Exhibit No. 8.3 is a generalized diagram illustrative of an electric system, showing how power flows from the generating station, and how it is then transmitted and distributed to the home of a residential customer. Other customers receiving service at higher voltage levels are also served from various points on the same system.

11. Q. Please describe, in more detail, how the Ameren system operates.

A. Referring to Ameren Exhibit No. 8.3, electrical power is produced at the generating stations at voltage levels generally ranging from 11,000 to 23,750 volts. To achieve transmission operating economies, this voltage is raised, or stepped up, by power transformers at the generating station sites to voltages generally ranging from 138,000 to 345,000 volts for transmission to the bulk substations strategically located throughout Ameren's service area or to other utility load control areas, as the case may be.

91 **12. Q. What is the function of the bulk substations?**

92 **A.** Bulk substations receive electrical power at transmission voltage levels. They
93 then lower, or step-down, this power to other transmission or distribution voltages
94 generally ranging from 138,000 volts to 34,500 or 69,000 volts. Such power then
95 flows, or is distributed, over (typically) 34,500 or 69,000 volt distribution lines to
96 distribution substations strategically located throughout the service area.
97

98 **13. Q. What function does the distribution substation perform?**

99 **A.** Distribution substations, which are far more numerous than bulk substations,
100 provide a further reduction in the electrical power voltage to a range of 4,160 to
101 13,800 volts, depending upon geographic locale. Such power is then distributed
102 over 4,160 to 13,800 volt distribution lines to or near the premises of customers.
103

104 **14. Q. After electrical power at 4,160 to 13,800 volts is delivered to a point near a**
105 **customer's premises, do any further reductions in voltage take place?**

106 **A.** Yes, in most instances. For example, while approximately 424 of AmerenCIPS'
107 largest industrial and commercial customers take service at the 4,160 to 13,800
108 volt range, or higher, in Illinois, the majority of AmerenCIPS' customers are
109 served at lower voltages, ranging from 120 to 480 volts. Such lower voltages are
110 achieved through the use of numerous line transformers located at or near such
111 customer's premises. This low voltage electrical power emanating from the line
112 transformer is delivered to a customer's premises over low voltage lines referred
113 to as "secondary" and "service" lines.

114

115 **15. Q. What voltages are utilized in providing electric service to residential**
116 **customers?**

117 **A.** Residential customers are served at either 120 or 240 volts depending upon the
118 customer's service entrance panel size and connected appliances.

119

120 **16. Q. What voltages are utilized to serve non-residential customers?**

121 **A.** Smaller non-residential customers are served at voltages from 120 to 480 volts
122 due to the wide range and variety of electrical consuming devices utilized by such
123 customers. Customers in the latter voltage range are often referred to as
124 "secondary" voltage customers. Other larger non-residential customers receiving
125 service at 4,160 to 13,800 volts are referred to as "primary" voltage customers.
126 For example, AmerenCIPS also serves approximately 19 customers in Illinois at
127 voltages above the 13,800 volt level. These are referred to as "high voltage"
128 customers.

129

130 **17. Q. In your description of the distribution system, are you using the term "lines"**
131 **in a general sense?**

132 **A.** Yes. Such lines may be overhead conductors or underground cables. Also, in the
133 case of overhead, this term also includes all poles, towers, insulators, crossarms
134 and all other hardware associated with such installations. In the case of
135 underground, the term "lines" refers to direct buried cable, as well as that installed

in single or multi- duct conduit, and all other associated hardware which may be required.

Cost of Distribution Delivery Service Concepts

18. Q. Please explain what is generally meant by the term "class cost of service."

A. The Ameren Companies currently provide distribution delivery service to their customers under the provisions of a number of generic non-residential rate classifications that are differentiated by customer size and the voltage level at which the customers are served. AmerenCIPS' current delivery service customer classes are Residential Delivery Service DS-1 (Future Use), General Delivery Service DS-2 (secondary or primary delivery voltage), and General Delivery Service DS-3 (primary or secondary voltage delivery service); AmerenUE's current customer classes are Residential Delivery Service DS-1 (Future Use), Small General Delivery Service DS-2, Large General Delivery Service DS-3, and Primary Delivery Service DS-4.

A class cost of service study is the result of the process of allocating and/or assigning the total jurisdictional cost of providing electric delivery service to these various customer classes in a way which best reflects the manner in which such costs are incurred in providing their electric service. The results of a class cost of service study are often referred to as "class revenue requirements," which represent each customer class's responsibility for its equitable share of the total annual cost of providing electric delivery service within the jurisdiction.

19. Q. How are these class cost of service study results used?

A. These class revenue requirements, or cost of delivery service results, establish the basis for the level of annual revenue which the utility should recover from each customer class, through the application of the charges within the rates designed for each of the various customer classes being served.

DST Rate Design

20. Q. Please define the term "rate design."

A. The term "rate design" refers both to the process of establishing the individual and specific charges (e.g. monthly customer charges, dollars per kilowatt demand and/or cents per kilowatt-hour energy charges) for each customer class, as well as to the actual structure of an individual class rate. The rate design or structure of a given rate class may range in complexity from the simple structure of a monthly customer charge and flat charge per kilowatt-hour, to a more complex combination of customer and multiple demand and/or energy charges. In all instances, however, it is axiomatic that the charges within a specific rate are established such that the application of these individual charges to the total annual customer class electrical usage will result in the collection of the annual revenue requirement, or cost of service, of each of the rate classes.

Cost of Service Studies

21. Q. What form of cost of service study is being submitted by the Ameren Companies in this case?

182 A. The traditional definition of "cost of service" is related to the aggregate
183 jurisdictional (Illinois retail or wholesale) accounting and financial data normally
184 submitted to a regulatory commission by a utility in support of a request for an
185 adjustment in its overall rate levels. Such a study is used to determine a utility's
186 aggregate level of revenues necessary to meet its operating and maintenance
187 expenses, depreciation provisions applicable to its investment in utility plant,
188 property taxes, income and other taxes, and a fair rate of return to the investors.
189 For the particulars of this case, the costs being allocated to the various customer
190 classes are limited to those costs booked and/or functionalized as distribution and
191 general plant, their associated operating and maintenance expenses, and
192 applicable A & G expenses.

194 22. Q. **Were the Illinois jurisdictional distribution revenue requirement studies,**
195 **performed and sponsored by Mr. Weiss in this case for AmerenCIPS and**
196 **AmerenUE, the starting point for the class cost of service studies performed**
197 **by Mr. Difani?**

198 A. Yes, they were. The class cost of service studies performed by Mr. Difani are a
199 continuation and refinement of the Ameren Companies' overall Illinois
200 jurisdictional distribution cost of service studies, resulting in an indication of the
201 costs incurred in serving the distribution system needs of each of the various
202 customer classes.

204 **23. Q. What general categories of cost were examined and considered in the**
205 **development of the allocated class cost of service studies being sponsored by**
206 **Mr. Difani in this case?**

207 **A.** For both AmerenCIPS and AmerenUE, a detailed analysis was made of all
208 elements of each Company's Illinois jurisdictional distribution investment and
209 expenses sponsored by Mr. Weiss, for the purpose of allocating such items to
210 each Company's present customer classes. Such elements of cost were classified
211 into customer related costs, and demand related costs by voltage level, based upon
212 a detailed analysis of the design and construction of each Company's distribution
213 system.

214
215 **24. Q. Why are costs separated into these customer and demand categories?**

216 **A.** It is generally agreed that each of these categories of cost is incurred as a result of
217 different cost causation factors. Hence, they should be allocated among the
218 various customer classes by different methodologies which take such cost
219 causation factors into consideration.

220
221 **25. Q. What are customer related distribution costs?**

222 **A.** Customer related distribution costs are those minimum costs necessary to just
223 make electric service available upon the request of the customer, whether or not
224 such service is utilized or to what extent. Examples of such costs include monthly
225 meter reading, billing, postage, customer accounting and customer service
226 expenses as well as the monthly ownership costs associated with the required

investment in the customer components of a meter, the service line, transformer and other distribution facilities necessary just to make service available to a customer, without the consideration of the amount of the customer's electrical use. In essence, these customer components are the costs necessarily incurred by a utility to make service available to a customer having zero usage.

26. Q. What are demand related distribution costs?

A. Demand related distribution costs are investment and other capacity related costs which remain essentially the same, in the short run, no matter how many kilowatt hours are sold. Demand costs are associated with the electrical facilities necessary to supply the customer's service requirements during periods of monthly maximum, or peak, rates of power consumption. During such peak periods this usage is expressed in terms of the customer's maximum power consumption, commonly referred to as kilowatts of demand. As so defined, demand related costs include those costs in excess of the aforementioned customer related costs. The majority of demand related distribution costs consist of the non-customer related portion of distribution plant and its associated operating expenses.

27. Q. How were distribution customer related costs determined?

A. The application of the widely used and generally accepted "zero intercept methodology", discussed extensively in the NARUC Cost Allocation Manual, was utilized for the determination of the customer component of various distribution

plant accounts. This methodology applies least-squares statistical regression techniques to the range of installed costs and capacities of the items within each distribution account. The result of this statistical application is the determination of the cost of the items in each distribution account at zero capacity (the zero intercept cost). Such costs are representative of the costs incurred by a utility to make service available to a customer having zero usage.

28. Q. Please describe the basis for the allocation factors used to allocate the various distribution related plant and operating expenses.

A. Initially, Distribution Accounts 360-369 were analyzed to determine the breakdown of each account into its customer related and demand related portions, with the demand related portion divided into various voltage levels designated as secondary, primary, high voltage (34/69 kV), and higher voltage (138 kV) distribution.

29. Q. How did each Company allocate the demand related portion of the various distribution accounts in its class cost of service study?

A. With the exception of Account 369-Services, the demand related portion of each of the remaining distribution accounts was allocated, by voltage levels, to the various customer classes on the basis of the maximum non-coincident demand of each customer class at the voltage level applicable to the distribution facility being allocated. The demand related portion of Account 369, which is related to secondary voltage customers only, was allocated to such customers on the basis of

the sum of such customers' maximum demands to reflect the fact that individual customer usage dictates the sizing of such facilities for each customer.

30. Q. How were the remaining distribution accounts allocated to customer classes?

A. Distribution Account 370-Meters was classified as customer related and allocated to the classes based on a weighting of the number of customers and current installed meter costs. Account 371-Installation On Customer's Premises (substation equipment) was allocated to the classes of the customers actually using such equipment. Account 373-Lighting was directly assigned to each Company's lighting class.

31. Q. How were distribution expenses associated with these plant accounts allocated in the class cost of service study?

A. The various Distribution O&M Expense Accounts 581-598 were individually aligned with one or more Distribution plant accounts and allocated to each customer class by Mr. Difani based upon the resulting allocation of the "aligned" plant accounts. This allocation of expenses can be described as the generally accepted "expense follows plant" cost allocation methodology.

32. Q. As described in the testimony of Mr. Weiss, the Company functionalized various General and Intangible Plant and A&G expenses as distribution related as a part of this proceeding. How were these costs allocated in the class cost of service study?

296 **A.** Such costs are normally allocated to customer classes on the basis of direct labor,
297 generally referred to as the "labor ratio" methodology. With the exception of
298 certain costs in these categories which are related to Illinois restructuring and
299 open access, these costs functionalized by Mr. Weiss were allocated to customer
300 classes on a labor ratio basis in this case, just as they would have been in any
301 other regulatory proceeding. As the labor in the distribution expense accounts
302 was also allocated on the basis of the distribution plant accounts (the expense
303 follows plant methodology), the use of labor ratios to allocate these functionalized
304 distribution costs tracks the allocations of both Distribution plant and O&M
305 expenses.

306
307 **33. Q.** **After the application of the customer and demand allocation factors for the**
308 **various elements of the distribution costs, what was the next step in the**
309 **completion of the class cost of service study?**

310 **A.** The next step was to aggregate such cost allocations for each customer class to
311 arrive at the total annual distribution costs associated with providing delivery
312 service to each customer class. This application of allocation factors to Illinois
313 jurisdictional distribution costs, and the aggregation of total annual distribution
314 costs to each of the customer classes are described in detail in Mr. Difani's
315 testimony.

316

Overview of Proposed Rates and Tariffs

34. Q. Please list the tariffs being filed by AmerenUE in this proceeding.

A. Ameren Exhibit No. 8.2 provides such a listing. I will be sponsoring the proposed Delivery Service tariffs for Residential, Small General Service, Large General Service, and Primary Service classes, as well as a tariff for Delivery Services for Self-Generators.

AmerenUE Availability Provisions

35. Q. Please discuss the Availability provisions of AmerenUE's Delivery Service tariffs with respect to existing bundled customers requesting delivery service.

A. A summary of the Availability provisions pertaining to existing bundled customers requesting delivery service is shown in the following table:

<u>Existing Bundled Customer</u>	<u>Voltage</u>	<u>Meter Type</u>	<u>Max. Load</u>	<u>Proposed DS Application</u>
Residential SC 1(I)	Secondary	kWh	N/A	DS-1
Small Gen. Serv. SC 2(I) [C & I]	Secondary	kWh	<150 kW	DS-2
Large Gen. Serv. SC 3(I) [C & I]	Secondary	kWh & kW	N/A	DS-3
Primary or Interruptible Serv. SC 4(I) or 7(I) [C & I]	Primary	kWh & kW	N/A	DS-4

Essentially, existing bundled customers requesting delivery service will be placed on the comparable DS tariff considering service type, voltage, and metering type. Such placement is useful to facilitate the computation of transition charges for all customers as well as to determine in an efficient manner the applicable DS tariff when customers request delivery services.

Also, load research and billing data for cost of service class allocations and rate design only exist for the current bundled rate classes. Consequently, defining the proposed DS rate classes by the existing bundled rate classes from which DS customers transfer provides a reasonable opportunity for AmerenUE to recover its DS revenue requirement.

36. Q. Please discuss the Availability provisions of AmerenUE's Delivery Service tariffs with respect to new customers requesting delivery service.

A. A summary of the Availability provisions pertaining to new customers requesting delivery service is as follows:

<u>New Customer</u>	<u>Voltage</u>	<u>Meter Type</u>	<u>Max. Load</u>	<u>Proposed DS Application</u>
Residential SC 1(I)	Secondary	kWh	N/A	DS-1
Small Gen. Serv. SC 2(I) [C & I]	Secondary	kWh	<100 kW	DS-2
Large Gen. Serv. SC 3(I) [C & I]	Secondary	kWh & kW	N/A	DS-3
Primary or Interruptible Serv. SC 4(I) [C & I]	Primary	kWh & kW	N/A	DS-4

Essentially, new customers requesting delivery service will be placed on the appropriate DS tariff considering service type, voltage, and expected electrical demand.

37. Q. Currently there are provisions in DS-2 that allow customers beginning in October 2001 to voluntarily move to either DS-3 on the basis of the stated electrical size criteria. After the seven-month voluntary election period, the

354 **Company would place customers on DS-2 or DS-3 solely on the basis of the**
355 **stated electrical size criteria. Please discuss the Company's proposal to**
356 **modify those provisions.**

357 **A.** The Company is proposing to eliminate the voluntary and mandatory
358 requirements concerning the movement of certain customers from one class to
359 another in this filing. After review, the impact of such requirements is difficult to
360 estimate because the development of load research data on which class cost of
361 service is developed and reliable estimates of the post class movement in billing
362 parameters for designing rates in this filing are not available. Without accurate
363 cost allocation and rate design data we have no choice but to defer any
364 reorganization of rate classes to a future period. Cost of service and rate design
365 must reflect the characteristics of the customer makeup in each rate class. Failure
366 to synchronize cost of service and pricing with the customers to be assigned to a
367 particular rate class will diminish the accuracy of pricing and could impact the
368 Company's recovery of its DS revenue requirement. Therefore, as stated earlier in
369 my testimony, the Company proposes to continue to map existing bundled rate
370 customers to the appropriate DS rates on the basis of their current bundled tariff
371 and not on the basis of their electrical demand.

372
373 **38. Q.** **Currently there are provisions in DS-3 and DS-4 that allow customers to**
374 **voluntarily move to DS-2 provided they have not established a maximum**
375 **monthly demand equal to or greater than 100 kW during the prior 12**
376 **months. Please describe the Company's proposal regarding those provisions.**

377 **A.** The Company proposes to eliminate these provisions. This is because the
378 Company has not proposed any ratcheted demand billing in this proceeding.
379 Since there will be no ratchet, customers experiencing reduced demands will see a
380 corresponding reduction in their billing. Therefore, there is no need for these
381 provisions.

382
383 **Delivery Services Rate Design for AmerenUE**

384 **39. Q. Please describe the allocation of revenue requirement among rate classes.**

385 **A.** The proposed revenue requirement was computed for each DS class to recover the
386 fully embedded test year revenue requirement as determined in the class cost of
387 service study sponsored by Mr. Philip Difani. For each DS customer class, by
388 voltage level, the cost of service study identified a customer related revenue
389 requirement as well as a demand related revenue requirement. The proposed
390 AmerenUE rate design largely adopted the customer related revenue requirement
391 from the cost of service study results to establish the proposed fixed monthly
392 customer and meter charges. The demand related revenue requirement for each
393 DS class was used as a guide to design the proposed per kWh and kW charges.
394 The billing units for the test year, by rate class and voltage level used to compute
395 the proposed charges are set forth in Ameren Exhibit No. 8.4.

396
397 **40. Q. Please describe the rate design structure used in Rate DS-1 for Residential**
398 **customers.**

399 A. Rate DS-1 uses a fixed charge and variable charge approach. A monthly
400 Customer Charge recovers all customer related costs per the class cost of service
401 study, including standard meter related costs. The Delivery Charge component
402 recovers the remaining class revenue requirement on a per kWh basis, not
403 recovered in the fixed monthly charge. The monthly minimum bill will be the
404 monthly Customer Charge and other applicable charges in Schedule 7.
405

406 **41. Q. When will Rate DS-1 become available?**

407 A. It will become available to residential customers on May 1, 2002.
408

409 **42. Q. Please describe the rate design structure being proposed for Rate DS- 2 for**
410 **non-residential secondary voltage Small General Delivery Service customers.**

411 A. Rate DS-2 is similar to the two-part rate design previously described for DS-1
412 above, however it has more components. DS-2 has a monthly Customer Charge
413 component to recover the customer related revenue requirements, except standard
414 meter-related costs. There is a separately stated Meter Charge designed to
415 recover metering related costs. The Delivery Charge recovers the remaining class
416 revenue requirement not recovered in the fixed monthly charges on a monthly per
417 metered kilowatt-hour charge.
418

419 **43. Q. Please discuss the rate design structure of Rate DS-3, applicable to**
420 **non-residential secondary voltage Large General Delivery Service customers.**

421 A. Rate DS-3 is structurally the same as Rate DS-2 with respect to the monthly
422 Customer Charge and Meter Charge. The proposed Distribution Delivery Charge
423 is a per kW demand charge applicable to the customer's monthly billing demand.

424 The monthly billing demand to which the Distribution Delivery Charge
425 may be applicable is the highest 15-minute demand established by the customer
426 during the billing period.

427
428 44. Q. **Please discuss the rate design structure of Rate DS-4, applicable to non-**
429 **residential primary voltage Primary General Delivery Service customers.**

430 A. Rate DS-4 is structurally the same as Rate DS-3 with respect to the monthly
431 Customer Charge and Meter Charge. Both of these fixed monthly billing
432 components are differentiated on the basis of the applicable voltage level. We are
433 proposing to establish charges for three separate voltage levels. These are
434 primary, 34 kV/69kV, and service at 138 kV or greater. The proposed
435 Distribution Delivery Charge is a per kW demand charge applicable to the
436 customer's monthly billing demand. We are proposing three Distribution voltage
437 differentiated Delivery Charges, as stated above. Currently, we apply a discount
438 percentage for customers electing to take service directly from the 34.5 kV or
439 higher voltage distribution systems. We are now eliminating that discount
440 percentage due to its being based on bundled service costs that also reflected
441 generation.

The monthly billing demand to which the Distribution Delivery Charge may be applicable is measured as the highest 15-minute demand established by the customer during the billing period.

Transmission and Miscellaneous Issues for AmerenUE

45. Q. In your discussion of the various proposed DS tariffs you only describe the jurisdictional services and rate design. How is transmission being handled in the DS tariffs?

A. Each of the DS tariffs references the charges associated with Ameren's Open Access Transmission Tariff ("OATT"). The applicable OATT charges are for transmission service and ancillary services. For customers taking power service from a Retail Electric Supplier ("RES"), the above DS transmission charges will be billed directly to the customer's transmission agent, or RES. For customers taking one of the Company's unbundled power services the foregoing transmission charges will appear on the customer's bill for delivery services.

46. Q. Are you proposing any other changes to the DS tariffs of any significance?

A. Yes. We have revised our loss adjustment factors that are used in our cost of service, as well as stated in our tariffs, to adjust the metered quantities for application of the Ameren OATT. These revisions reflect AmerenUE specific loss factors as opposed to the current factors reflecting a composite of AmerenCIPS and AmerenUE loss factors. The AmerenUE specific loss factors are lower than the current composite loss factors. As the distribution systems of

AmerenCIPS and AmerenUE are not interconnected, justification exists for separate loss adjustment factors. As a result of adopting the revised energy loss factors, certain additional tariff sheets had to be revised in order to implement the new loss adjustment factors. Those additional tariff sheets are Rider ISS – Interim Supply Service, Rider PRPS – Partial Requirements Power Service and Rider MV – Market Value of Power and Energy. The revisions to those sheets replaced the loss adjustment factors with a reference to the applicable delivery service tariff.

47. Q. Please describe Rider SG for Delivery Services for Self-Generators.

A. This tariff is designed to compensate the Company for its investment in transmission and distribution facilities that are standing by to provide Delivery Services to customers when their generation is not operating. The Company must plan its delivery system for meeting a customer's entire load. If a customer elects to provide all or a portion of its power and energy requirements from its own generation, Ameren must still plan and maintain investment in transformation and wires to stand-by in the event such generation does not start or is turned off and the customer requires delivery services.

48. Q. Why is it important that the Commission permit implementation of this tariff?

A. Failure of the Company to require payment under this Rider will effectively result in other customers paying for costs that are being incurred on behalf of such

488 self-generators. If self-generators desire to avoid this charge, they simply must
489 isolate their load served by their own generation so that it does not impose any
490 demand on the Company's facilities in the event a customer's generation is not
491 running.

492

493 **49. Q. Does this conclude your direct testimony?**

494 **A.** Yes, it does.

QUALIFICATIONS

My name is Wilbon L. Cooper and I reside in St. Louis, Missouri. My educational background consists of a Bachelor of Science degree in Electrical Engineering (BSEE) from the University of Missouri-Rolla.

I was employed as an Assistant Engineer in the Rate Engineering Department of Union Electric in June 1980. I am currently a Supervising Engineer – Rate Analysis, in the Rate Engineering Department of Corporate Planning at Ameren Services Company. In this position I am responsible for meeting the analytical requirements of the Company's retail gas and electric rates and wholesale electric rates, including load research and various cost of service and rate design studies, as assigned.

I have previously submitted testimony before the regulatory commissions of Illinois, Missouri, and Iowa.

Proposed AmerenUE Delivery Services Tariffs in Electric Rate Schedule III. C. C. No. 7

Tariff

Table of Contents

Rate DS-1 - Residential Delivery Service

Rate DS-2 - General Delivery Service

Rate DS-3 - Large General Delivery Service

Rider DS-4 - Primary Delivery Service

Rider SG - Delivery Service for Self-Generation

Rider ISS - Interim Supply Service

Rider PRPS - Partial Requirements Power Service

Rider MV - Market Value of Power and Energy

Union Electric Company
January 1999 - December 1999
Electric Billing Units

	Test Year Billing Units
<u>DS-1 Residential Delivery Service</u>	
Customer Bills	650,688
Distribution Delivery (MWH)	605,549
 <u>DS-2 General Delivery Service</u>	
Customer Bills:	
Secondary	83,820
Distribution Delivery (MWH):	
Secondary	280,351
 <u>DS-3 Large General Delivery Service</u>	
Customer Bills:	
Secondary	3,264
Distribution Delivery (KW):	
Secondary	865,761
 <u>DS-4 Primary Delivery Service</u>	
Customer Bills:	
Primary	720
High Voltage	36
138KV and above	24
Distribution Delivery (KW):	
Primary	1,750,450
High Voltage	1,739,559
138KV and above	1,077,268

**UNION ELECTRIC COMPANY
DEVELOPMENT OF DISTRIBUTION DELIVERY SERVICE CHARGES
AND MONTHLY CUSTOMER AND METER CHARGES
(EXCLUDES ADD-ON TAXES AND TRANSMISSION CHARGES)**

<u>RATE</u>	<u>CUSTOMERS</u>	<u>KWH</u>	<u>KW</u>	<u>KWH/KW DELIV CHG</u>	<u>DELIV CHG \$</u>	<u>ANNUAL BILLS</u>	<u>METER AND CUST CHG</u>	<u>METER AND CUST CHG \$</u>	<u>TOTAL BASE REV</u>	<u>OTHER REV</u>	<u>TOTAL REVENUE</u>	<u>REVENUE REQUIREMENT</u>
RESIDENTIAL DS-1	54,224	605,548,982		\$ 0.01120	\$ 6,782,149	650,688	\$ 16.94	\$ 11,022,655	\$ 17,804,803	\$ 336,713	\$ 18,141,516	\$ 18,145,373
GENERAL DEL DS-2	6,985	280,351,108		\$ 0.00910	\$ 2,551,195	83,820	\$ 23.43	\$ 1,963,903	\$ 4,515,098	\$ 40,046	\$ 4,555,144	\$ 4,554,607
LRG GEN DEL DS-3	272		865,761	\$ 2.960	\$ 2,562,653	3,264	\$ 161.44	\$ 526,940	\$ 3,089,593	\$ 11,393	\$ 3,100,986	\$ 3,100,894
PRIMARY DS-4												
PRIMARY	60		1,750,450	\$ 1.530	\$ 2,678,189	720	\$ 322.07	\$ 231,890	\$ 2,910,079	\$ 14,416	\$ 2,924,495	\$ 4,369,010
HIGH VOLTAGE	3		1,739,559	\$ 1.150	\$ 2,000,493	36	\$ 4,189.36	\$ 150,817	\$ 2,151,310	\$ 4,175	\$ 2,155,485	\$ 1,186,965
138KV+	2		1,077,268	\$ 0.990	\$ 1,066,495	24	\$ 2,339.48	\$ 56,148	\$ 1,122,643	\$ 2,290	\$ 1,124,933	\$ 649,122
					\$ 5,745,177			\$ 438,855	\$ 6,184,032	\$ 20,881	\$ 6,204,913	\$ 6,205,097
LIGHTING									\$ 2,238,580	\$ 7,909	\$ 2,246,489	\$ 2,246,489
TOTAL REVENUES					\$ 17,641,173			\$ 13,952,352	\$ 33,832,105	\$ 416,942	\$ 34,249,047	\$ 34,252,458

DETERMINATION OF SEPARATE METER AND CUSTOMER CHARGE

<u>RATE</u>	<u>METER AND CUST CHG</u>	<u>METER CHG</u>	<u>CUST CHG</u>
RESIDENTIAL DS-1	\$ 16.94		\$ 16.94
GENERAL DEL DS-2	\$ 23.43	\$ 5.42	\$ 18.01
LRG GEN DEL DS-3	\$ 161.44	\$ 29.95	\$ 131.49
PRIMARY DS-4	\$ 322.07	\$ 76.15	\$ 245.92
HIGH VOLTAGE	\$ 4,189.36	\$ 76.15	\$ 4,113.21
138KV+	\$ 2,339.48	\$ 76.15	\$ 2,263.33

PROPOSED VS CURRENT DELIVERY SERVICE CHARGES

	<u>CURRENT MONTHLY CUST CHARGE</u>	<u>PROPOSED MONTHLY CUST CHARGE</u>	<u>CURRENT MONTHLY METER CHARGE</u>	<u>PROPOSED MONTHLY METER CHARGE</u>	<u>CURRENT DELIVERY CHARGE</u>	<u>PROPOSED DELIVERY CHARGE</u>
<u>DS-1</u>		\$ 16.94				\$ 0.0112 /KWH
<u>DS-2</u>						
SEC	\$ 8.38	\$ 18.01	\$ 5.42	\$ 5.42	\$ 0.0098 /KWH	\$ 0.0091 /KWH
<u>DS-3</u>						
SEC	\$ 60.71	\$ 131.49	\$ 29.95	\$ 29.95	\$ 3.05 /KW	\$ 2.96 /KW
<u>DS-4</u>						
PRIMARY	\$ 979.34	\$ 245.92	\$ 76.15	\$ 76.15	\$ 2.46 /KW	\$ 1.53 /KW
HIGH VOLTAGE	\$ 979.34	\$ 4,113.21	\$ 76.15	\$ 76.15	\$ 2.36 /KW	\$ 1.15 /KW
138KV+	\$ 979.34	\$ 2,263.33	\$ 76.15	\$ 76.15	\$ 2.36 /KW	\$ 0.99 /KW

NOTE: The values shown for the current Customer Charge and Current Meter Charge reflect the charges in the Company's compliance tariffs filed in Docket No. 99-0013 to